

1    **ABSTRACT**

2           An amplifier circuit with a shared current source a first amplifier, a second  
3    amplifier and a current source. The output of the first amplifier (10) is coupled to  
4    the current source (30). When the second amplifier (20) is cascaded onto the first  
5    amplifier (10), the current source (30) is also connected to the second amplifier  
6    (20), such that these two amplifiers can share a common drive current, so the  
7    power dissipated by these two amplifiers is greatly reduced. This technique is  
8    implemented with Class A amplifiers, Class B amplifiers, Class AB amplifiers or  
9    a combination of the above amplifiers in cascade.